Remarks

Claims 1, 2, 4, 8-18, and 20-22 are pending. Claims 3, 5, and 19 are canceled in this amendment. Claims 6, 7, and 23-27 were previously canceled. Claims 1 and 8 are amended to state that the lecithin product has a sugar content of less than 1.0 wt.% of total dry matter. Support for this amendment can be found, *inter alia,* in canceled claim 5.

Applicant gratefully acknowledges the withdrawal of claims 1-3 and 5 under 35 U.S.C. §102(b) as being anticipated by Umeda et al. (U.S. Patent No. 5,833, 858).

Rejection under 35 U.S.C. §103

Claims 1-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al. (U.S. Patent No 5,833,858) as further evidenced by the Merck Index alone or in view of Losch et al. (U.S. Patent No. 5,310,734).

Umeda et al. teach making a product wherein the acidic phospholipids are concentrated when compared to its starting material. As stated in col 5 at lines 35-39,

> The acidic phospholipids contained in the acidic phospholipid concentrate obtained by the method of the present invention include phosphatidylinositol (PI), phosphatidic acid (PA), phosphatidylserine (PS) and lysophosphatidic acid (L-PA). wherein the phosphatidylcholine (PC) content is from 0.3-0.7. Losch et al. relate to a phospholipid composition wherein the phosphatidylcholine (PC) content is at least 80% by weight.

Thus acidic phospholipids are the sum of PI, PA, PA, and L-PA. Posphatidylcholine (PC) is not part of the acidic phospholipids. In Umeda et al., the first extraction step is to remove PC. This is done by using a solvent of either 100 % ethanol or a blend of ethanol:water in a ratio as low as 85:15. In col 3 a lines 13-18, Umeda et al. state:

> In the lower alcohol solvents shown in Table 1, the moisture content of the lower alcohol is preferably 15% or less, still preferably 10% or less, in order to improve the effect of concentrating the acidic phospholipids in the phospholipid mixture. It is also possible to use ethanol or a lower alcohol substantially free from moisture.

Clearly Umeda et al. intend to use an alcohol solvent containing as little moisture as possible. The reason is to solubilize as much PC as possible in order to increase the concentration of the acidic phospholipids. This is evident in Table 3 where the Examples 1-6 have a PC value of from 0.3 to 0.7.

In the present application, the claims have been amended to state that the lecithin product has a sugar content of less than 1.0 wt.% of total dry matter. Umeda et al. teach away from a lecithin product having a low sugar content by virtue of the fact that Umeda et al. specify using solvent substantially free from moisture. Further, even if Umeda et al. were to have a phospholipid composition with a low sugar value (Applicant is not agreeing to that premise, but only postulating), the phospholipid still has a very low PC content.

It is stated in the Office Action that Table 2 of Umeda et al. disclose an obvious alternative to the phospholipids composition of the present claims. The phospholipids of Table 2 are starting materials for Examples 1-6. These starting materials are crude lecithins wherein the object is to concentrate the acidic phospholipids. Since these starting materials are crude lecithins, they have a sugar content of well in excess of 10 wt.% of total dry matter. In the present application, the claims have been amended to state that the lecithin product has a sugar content of less than 1.0 wt.% of total dry matter.

Losch et al. relate to a comminuted phospholipid composition wherein the phosphatidylcholine (PC) content is at least 80% by weight. In col 3 lines 35-37, Losch et al state that their composition also does not contain any phosphatidylethanolamine (PE) and /or any phosphatidylinositol (PI). In present claim 1, the phospholipids have a phosphatidyl-choline (PC) content of from 9 wt.% to 24.5 wt.% of total dry matter, a phosphatidyl-ethanolamine (PE) content of from 19.6 wt.% to 23 wt.% of total dry matter, and a phosphatidyl-inositol (PI) content of from 4 wt.% to 15 wt.% of total dry matter.

One would not take the teachings of either Umeda et al. wherein the method is directed to an acidic phospholipid having a very low (PC) content of from 0.3-0.7 alone or combine them with the teachings of Losch et al. wherein the method is directed to a phospholipid composition having a very high (PC) content of greater than 80% and very low contents of both PE and PI to arrive at Applicant's invention wherein the lecithin product has a PC content of from 9 wt.% to 24.5 wt.%, a PE content of from 19.6 wt.% to 23 wt%, a PI content of from 4 wt% to 15 wt%, and a sugar content of less than 1.0 wt.% of total dry matter.

In order for the Office to show a *prima facie* case of obviousness, M.P.E.P. §2143 requires that the Office must meet three criteria: (1) the prior art reference must teach or suggest all of the claim limitations; (2) there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to

modify the reference, and (3) there must be some reasonable expectation of success. The Office has clearly failed to meet its burden under (1) and/or (2) above, since the teachings of Umeda et al. alone or combined with the teachings of Losch et al. fail to teach or suggest all of the claim limitations of Applicant's claim 1, as amended. Reconsideration and withdrawal of this ground of rejection is respectfully requested.

Claims 8-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pardun (U.S. Patent No. 3,661,946) as further evidenced by the Merck Index.

Pardun teaches a process for the separation of phosphatide fractions from mixtures containing them by using a monoglyceride. Examples 1-3 and their attendant tables give choline lecithin (L) and cephalin (C) analyses data. Choline lecithin is the same as phosphatidylcholine (PC). Cephalin (C) is the combination of phosphatidylethanolamine (PE) and phosphatidylserine (PS).

In the second part of Example 3 of Pardun, crude lecithin is mixed with alcohol. Two phases are obtained. Most of the PC is extracted from the crude lecithin and dissolves in the alcohol. Some C is also dissolved in the alcohol. Thus the liquid phase is alcohol with dissolved PC and C. The PC:C ratio is 5:1. The residue is a mixture of PC and C. Its PC:C ratio is about 1:1.

Pardun teaches the preparation of a phosphatide having at least 83% PC by evaporation of the alcohol from the alcohol layer. This is not the present invention since the present invention is a composition wherein the lecithin product has a sugar content of less than 1.0 wt.% of total dry matter and the phospholipids have a phosphatidyl-choline (PC) content of from 9 wt.% to 24.5 wt.% of total dry matter.

Further, the Pardun resin is not the present invention. The Pardun resin from Example 3 has a PC content of about 13%. The present invention has a PC content of from 9 wt.% to 24.5 wt.% of total dry matter. The Pardun resin from Example 3 has a C content of about 14%. The present invention has a PC content of from 9 wt.% to 24.5 wt.% of total dry matter. As stated above, Pardun teaches that (C) is the combination of phosphatidylethanolamine (PE) and phosphatidylserine (PS). The present invention does not teach a PS content. However, since the present PE is from 19.6 wt.% to 23 wt.% of total dry matter, it alone is greater than the C of Pardun (the combination of PE and PS).

The teachings of Umeda et al. are discussed above.

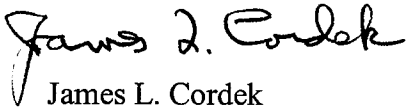
One would not take the teachings of Pardun, either for its PC content of the final product or for its C content and combine it with the teachings of Umeda et al. to arrive at the present claim 8, as amended.

In order for the Office to show a *prima facie* case of obviousness, M.P.E.P. §2143 requires that the Office must meet three criteria: (1) the prior art reference must teach or suggest all of the claim limitations; (2) there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference, and (3) there must be some reasonable expectation of success. The Office has clearly failed to meet its burden under (1) and/or (2) above, since the teachings of Pardun with Umeda fail to teach or suggest all of the claim limitations of Applicant's claims 8-18 and 20-22, as amended, and further that there is no motivation by one of ordinary skill in the art for employing limitations present in Applicant's claims 8-18 and 20-22, as amended, not present in Pardun or Umeda et al. Reconsideration and withdrawal of this ground of rejection is respectfully requested.

In view of the above, Applicants respectfully request favorable reconsideration and allowance of all pending claims. If any additional fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 50-0421.

Respectfully submitted,
SOLAE, LLC

Date August 23, 2007



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